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|---|-------------|----------------------|---------------------|------------------|
| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/724,500  | 12/01/2003  | Shaoming Wu          | USP2172A-GRTC       | 1003             |
| 30265   | 7590        | 08/04/2005           | EXAMINER            |                  |
| RAYMOND Y. CHAN<br>108 N. YNEZ AVE., SUITE 128<br>MONTEREY PARK, CA 91754 |             |                      | RAEVIS, ROBERT R    |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2856                |                  |

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/724,500

Applicant(s)

WU, SHAOMING

Examiner

Robert R. Raevis

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2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

The disclosure is objected to because of the following informalities: the numeral "412" is not in the specification. (Should "411" (p. 7, line 21) read - - 412 - -?) On page 8, after "even" (line 6) insert - - if - -.

Appropriate correction is required.

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to claim 1, there is no "displacement of said transmission shaft with respect to said penetrating pin" that allows for testing of hardness as claimed. Those two elements move together when the head 31 is driven into any sample.

As to claims 1,8,6,7, what does "universally contacting" mean?

On p. 7, now is "unwanted lateral movement" (last two lines) minimized ("minimize" on line 31)?

As to claim 2, how does the "wheel" drive the driving axle? How does rotational motion of the wheel translate into linear motion of the axle 20? The disclosure is silent in that regard.

As to claims 5,4, what type of sensor is used here? Is it a LVDT, capacitive, inductive, or other? How is the sensor coupled to the axle 20 to provide for measuring? Even Figure 3 does not present a variable component.

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As to claims 12,11,10,9, what type of sensor is used here? Is it a LVDT, capacitive, inductive, or other? How is the sensor coupled to the axle 20 to provide for measuring? Even Figure 3 does not present a variable component.

What does the "circuit" of Figure 3 correspond to? Is it related to the force sensor, the displacement sensor, or even something else?

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, what does "universally" (line 12) mean? (The term appears on p. 7, line 21, without explanation.) Also, "displacement of said transmission shaft with respect to said penetrating pin" is inconsistent with p. 8, lines 11-17 of the written specification.

As to claims 8,6,7, what does "universally" mean?

Claims 1,6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Napetschnig.

Napetschnig teaches a tester, including: frame 71,22,23,26,11; driving axle 53 slidable located in a chamber of the frame; penetrating pin 13, in a guiding channel of the frame and coaxial with the driving axle; linear displacement device including a transmission shaft 36 between the driving axle and pin, and a displacement sensor 17 supported at the transmission shaft, wherein the axle is driven for applying a force to the pin through the shaft, and the sensor detects linear displacement of the shaft.

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As to claim 1, the pin 13 is appears to be guided, and thus slidable, within the frame 11; but if not, it is known to utilize a sliding-type guide to securely direct a contact element in a hardness tester. Also, the axle 36 contacts many elements in Figure 3.

As to claim 6, the shaft contacts the axle by way of spring 14, and contacts the pin via threads.

Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Napetschnig.

As to claim 4, sensor 17 utilizes strain gages which necessarily include terminals for connection of the gages to circuitry. It would have been obvious to employ terminals along the longitudinal axis of the sensor because strain measuring gages would extend along that same axis.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Targosz teaches linearly connected elements 20,38,26 to measure hardness. Foltz et al teach a pivoted 14 support for a hardness tester. Henrikson's indenter 43 slides within its holder. Argabrite et al employ a drive wheel 54, while Mance teaches . Ernst teaches use of a frame 2. Mance teaches use of a rod 10 and replaceable tip 15. Dewey's tester is hand held.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raevis whose telephone number is 571-272-2204. The examiner can normally be reached on Monday to Friday from 7am to 4pm.

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Claims 1,6,4 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Napetschnig.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RCV

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